

Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
Sheet	1	of	1	Application Number	09/881934
				Filing Date	06/14/01
				First Named Inventor	ENRIQUE MUSOLL
				Group Art Unit	2188
				Examiner Name	KEVIN L. ELLIS
				Attorney Docket Number	MIPS.0173-00-US

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2(if known)</sup>			
WKR		US-5784649	07-21-1998	BEGUR ET AL.	
		US-6529515	03-04-2003	RAZ ET AL.	
		US-6640248	10-28-2003	JORGENSEN, JACOB W.	
		US-6625808	09-23-2003	TARDITI, DAVID R.	
		US-6738371	05-18-2004	AYRES, LAWRENCE	
		US-6738378	5-18-2004	TUCK, III; RUSSELL R.	
WKR		US-6813268	11-02-2004	KALKUNTE ET AL.	
		US			

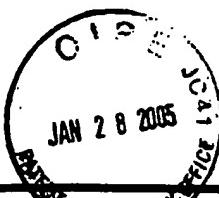
## **FOREIGN PATENT DOCUMENTS**

Examiner Signature	Kevin L. Ellis	Date Considered	3/16/05
-----------------------	----------------	--------------------	---------

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.<sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).<sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.<sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Substitute for INFORMATION DISCLOSURE STATEMENT BY APPLICANT

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

2

**Complete if Known**

Application Number	09/881934
Filing Date	02/13/04
First Named Inventor	ENRIQUE MUSOLL
Group Art Unit	2188
Examiner Name	KEVIN L. ELLIS
Attorney Docket Number	MIPS.0173-00-US

<b>U.S. PATENT DOCUMENTS</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
KL		US-5708814	01-13-1998	SHORT ET AL.	
		US-5724565	03-13-1998	DUBEY ET AL.	
		US-5784699	07-21-1998	MCMAHON ET AL.	
		US-6460105	10-01-2002	JONES ET AL.	
		US-6523109	02-18-2003	MEIER, STEPHAN G.	
		US-20010004755	06-21-2001	LEVY ET AL.	
		US-20020049964	04-25-2002	TAKEYAMA ET AL.	
LR		US-20020071393	06-13-2002	ENRIQUE MUSOLL	
		US			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
LR	AA	WO 03/005645A2	01-16-2003	SAMPATH ET AL.		

Examiner Signature	Kevin L. Ellis	Date Considered	3/16/05
--------------------	----------------	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/08A (08-03)

Approved for use through 10/31/2002. OMB 0651-0031

**U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE**  
Do not submit forms to the U.S. Patent and Trademark Office unless it contains a valid OMB control number.

Substitute for form 148 PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 2

<p>Substitute for form 1465 PTO TRADEMARKS</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>				<p><i>Complete if Known</i></p> <table> <tr> <td>Application Number</td> <td>09/881934</td> </tr> <tr> <td>Filing Date</td> <td>02/13/04</td> </tr> <tr> <td>First Named Inventor</td> <td>ENRIQUE MUSOLL</td> </tr> <tr> <td>Group Art Unit</td> <td>2188</td> </tr> <tr> <td>Examiner Name</td> <td>KEVIN L. ELLIS</td> </tr> <tr> <td>Attorney Docket Number</td> <td>MIPS.0173-00-US</td> </tr> </table>		Application Number	09/881934	Filing Date	02/13/04	First Named Inventor	ENRIQUE MUSOLL	Group Art Unit	2188	Examiner Name	KEVIN L. ELLIS	Attorney Docket Number	MIPS.0173-00-US
Application Number	09/881934																
Filing Date	02/13/04																
First Named Inventor	ENRIQUE MUSOLL																
Group Art Unit	2188																
Examiner Name	KEVIN L. ELLIS																
Attorney Docket Number	MIPS.0173-00-US																
Sheet	2	of	2														

## **NON PATENT LITERATURE DOCUMENTS**

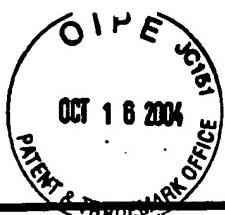
Examiner Signature	Kevin L. Ellis	Date Considered	3/16/05
-----------------------	----------------	--------------------	---------

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

*If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.*



OCT 16 2004

PTO/SB/08A (08-0

Approved for use through 10/31/2002. OMB 0651-00

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.**

Substitute for form 1449A/PTO				<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				Application Number	09/881934
				Filing Date	02/13/04
				First Named Inventor	ENRIQUE MUSOLL
				Group Art Unit	2188
				Examiner Name	KEVIN L. ELLIS
Sheet	1	of	3	Attorney Docket Number	MIPS.0173-00-US

## **U.S. PATENT DOCUMENTS**

## **FOREIGN PATENT DOCUMENTS**

Examiner Signature	Kevin L. Ellis	Date Considered	3/16/05
-----------------------	----------------	--------------------	---------

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST .3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Substitute for form 1449A/PTO				<b>Complete If Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				Application Number	09/881934
				Filing Date	02/13/04
				First Named Inventor	ENRIQUE MUSOLL
				Group Art Unit	2188
				Examiner Name	KEVIN L. ELLIS
				Attorney Docket Number	MIPS.0173-00-US
Sheet		2	of	3	

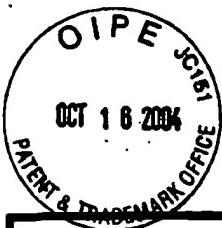
NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T <sup>2</sup>
VL	AA	YAMAMOTO, WAYNE. <i>An Analysis of Multistreamed, Superscalar Processor Architectures</i> . University of California Santa Barbara Dissertation. December 1995. Santa Barbara, US.				
	AB	YAMAMOTO et al. "Increasing Superscalar Performance Through Multistreaming." <i>Parallel Architectures and Compilation Techniques (PACT '95)</i> . 1995				
	AC	<i>The PowerPC Architecture: A Specification for a New Family of RISC Processors</i> . 2 <sup>nd</sup> Ed. May 1994. pp. 70-72. Morgan Kaufmann. San Francisco, US.				
	AD	<i>MC68020 32-Bit Microprocessor User's Manual</i> . 3 <sup>rd</sup> Ed.. 1989. pp. 3-125, 3-126, and 3-127. Prentice Hall, NJ, US.				
	AE	POTEL, M. J. "Real-Time Playback in Animation Systems." <i>Proceedings of the 4<sup>th</sup> Annual Conference on Computer Graphics and Interactive Techniques</i> . 1977. pp. 72-77. San Jose, CA, US.				
	AF	<i>ARM Architecture Reference Manual</i> . 1996. pp. 3-41, 3-42, 3-43, 3-67, and 3-68. Prentice Hall, NJ, US.				
	AG	<i>ESA/390 Principles of Operation</i> . IBM Online Publications Center Reference Number SA22-7201-08. Table of Contents and paras. 7.5.31 and 7.5.70. IBM Corporation. Boulder, CO, US.				
	AH	<i>MC88110 Second Generation RISC Microprocessor User's Manual</i> . 1991. pp. 10-66, 10-67, and 10-71. Motorola, Inc.				
	AI	DIEFENDORFF, KEITH ET AL. "Organization of the Motorola 88110 Superscalar RISC Microprocessor." <i>IEEE Journal of Microelectronics</i> . April 1992. pp. 40-63. Vol. 12, No. 2. IEEE. New York, NY, US.				
	AJ	<i>PA-RISC 2.0 Architecture</i> . 1996, pp. 7-106 and 7-107. Prentice Hall. NJ, US.				
	AK	DIEFENDORFF, KEITH ET AL. "AltiVec Extension to PowerPC Accelerates Media Processing." <i>IEEE Journal of Microelectronics</i> . Vol. 20, No. 2 (2000): pp. 85-95				
	AL	GRUNEWALD, WINFRIED ET AL. "Towards Extremely Fast Context Switching in a Block Multithreaded Processor." <i>Proceedings of EUROMICRO 22</i> , 1996. pp. 592-599				
	AM	BRADFORD, JEFFREY ET AL. "Efficient Synchronization for Multithreaded Processors." <i>Workshop on Multithreaded Execution, Architecture, and Compilation</i> . Jan-Feb 1998. pp. 1-4				
VL	AN	PAI, VIJAY ET AL. "An Evaluation of Memory Consistency Models for Shared-Memory Systems with ILP Processors." <i>Proceedings of ASPLOS-VII</i> , Oct. 1996: pp. 12-23, ACM, Inc.				

Examiner Signature	Kevin L. Ellis	Date Considered	3/16/05
--------------------	----------------	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



PTO/SB/08A (08-03)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				<b>Complete if Known</b>	
				Application Number	09/881934
				Filing Date	02/13/04
				First Named Inventor	ENRIQUE MUSOLL
				Group Art Unit	2188
				Examiner Name	KEVIN L. ELLIS
Sheet	3	of	3	Attorney Docket Number	MIPS.0173-00-US

<b>NON PATENT LITERATURE DOCUMENTS</b>				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
KL	AO	YOAZ ET AL. "Speculation Techniques for Improving Load Related Instruction Scheduling." 1999. Pages 42-53, IEEE.		
	AP	KESSLER, R. E. "The Alpha 21264 Microprocessor: Out-of-Order Execution at 600 MHz." August 1998.		
	AQ	DONALDSON ET AL. "DISC: Dynamic Instruction Stream Computer, An Evaluation of Performance." 26 <sup>th</sup> Hawaii Conference on Systems Sciences, Vol. 1. 1993. Pages 448-456.		
	AR	NEMIROVSKY ET AL. "DISC: Dynamic Instruction Stream Computer." ACM. 1991. Pages 163-171		
	AS	MUSOLL ET AL., "Mechanism to Activate a Context When No Stream is Running in a Multi-Streaming Processing Core," April 16, 2001, Disclosure Document #492431, USPTO		
	AT	MUSOLL ET AL., "Mechanism for Allowing a Limited Packet Head and/or Tail Growth Without Moving the Packet to a Different Memory Location," April 16, 2001, Disclosure Document #492429, USPTO		
	AU	MUSOLL, ENRIQUE, "Functional Validation of a Packet Management Unit," May 18, 2001, Disclosure Document #494011, USPTO		
	AV	MELVIN ET AL., "Extended Instruction Set for a Packet Processing Applications," July 5, 2001, Disclosure Document #496559, USPTO		
KL	AW	MUSOLL ET AL., "Mechanism to Overflow Packets to a Software Controlled Memory When They Do Not Fit into a Hardware Controlled Memory," July 3, 2001, Disclosure Document #496391, USPTO		

Examiner Signature	Kevin L. Ellis	Date Considered	3/16/05
--------------------	----------------	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.